



An Inventory of Arts-Related Academic and Social Outcomes Found in *Critical Links*

This chart is excerpted from James Catterall's essay, "The Arts and the Transfer of Learning," in the research compendium, *Critical Links: Learning in the Arts and Student Academic and Social Development*. The chart provides a preliminary inventory of the academic and social outcomes that are shown to be, by the studies collected in *Critical Links*, related to learning in the arts. The arts experiences in dance, drama, music, multiple arts, and visual arts that are examined by the studies in *Critical Links* are listed on the left hand side of the chart and the related outcomes, in the domain of cognitive skills and motivations to learn, are listed down the right hand side. The strength of the relationships between the particular arts learning experiences and the outcomes differ; a reader should examine the specific study summaries in *Critical Links* for further details.

Figure 1. Compendium Summary: The Arts and Academic and Social Outcomes

Arts Learning:

Cognitive Capacities and Motivations to Learn:

Visual Arts

Drawing	Content and organization of writing.
Visualization training	Sophisticated reading skills/interpretation of text.
Reasoning about art	Reasoning about scientific images.
Instruction in visual art	Reading readiness.

Music

Early childhood music training	Cognitive development
Music listening	Spatial reasoning. Spatial temporal reasoning. Quality of writing. Proximity of writing.
Piano/keyboard learning	Mathematics proficiency. Spatial reasoning.
Piano and voice	Long-term spatial temporal reasoning.
Music performance	Self-efficacy. Self-concept.
Instrument training	Reading. SAT verbal scores.
Music with language learning	English skills for ESL learners.

Classroom Drama

Dramatic enactment	Story comprehension (oral and written). Character identification. Character motivation. Increased peer interaction. Writing proficiency and proximity. Conflict resolution skills.
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Concentrated thought.
 Understanding social relationships.
 Ability to understand complex issues and emotions.
 Engagement.
 Skill with subsequently read, unrelated texts.
 Problem-solving dispositions/strategies.
 General self-concept.

Dance

Traditional dance

Self-confidence.
 Persistence.
 Reading skills.
 Nonverbal reasoning.
 Expressive skills.
 Creativity in poetry.
 Social tolerance.
 Appreciation of individual/group social development.

Creative dance

General creative thinking – fluency
 General creative thinking – originality, elaboration, flexibility.

Multi-arts Programs

Integrated arts/academics

Reading, verbal and mathematics skills.
 Creative thinking.
 Achievement motivation.
 Cognitive engagement.
 Instructional practice in the school.
 Professional culture of the school.
 School climate.
 Community engagement and identity.

Intensive arts experience

Self-confidence.
 Risk-taking.
 Paying attention.
 Persevering.
 Empathy for others.
 Self-initiating.
 Task persistence.
 Ownership of learning.
 Collaboration skills.
 Leadership.
 Reduced dropout rates.
 Educational aspirations.
 Higher-order thinking skills.

Arts-rich school environment

Creativity.
 Engagement/attendance.
 Range of personal and social developments.
 Higher-order thinking skills.